

Professional and Managerial Branch
Engineering Group
Registered Engineer Series

MECHANICAL ENGINEER III

09/89

CHARACTERISTICS OF THE CLASS:

Under direction, supervises engineering and support personnel and performs a variety of mechanical engineering duties; performs related duties as required.

EXAMPLES OF DUTIES:

Designs and supervises personnel engaged in the design of mechanical systems such as heating, ventilating and air conditioning systems for City owned facilities; performs and coordinates engineering services concerning maintenance, repair, modification, replacement and operation of mechanical systems; trains personnel in the operation and maintenance of mechanical systems; reviews plans of mechanical systems prepared by consultants; supervises and inspects City facilities to determine condition of equipment; supervises the preparation and maintenance and major repair work; prepares and reviews specifications and costs estimates of repairs, modifications, or replacement of mechanical systems.

Supervises and conducts energy management and utility studies; prepares recommendations and implements utility conservation programs in City facilities; advises other departments in the development and evaluation of utility budgets; develops and implements utility conservation policies and procedures; plans and develops a data base for utility conservation management information systems; plans, prepares and administers federal and state energy grants.

Supervises the inspection of contract projects; assigns inspection and test of workmanship and materials used in construction; interprets plans and specifications of work being done under contract; reviews plans for proposed mechanical systems prepared by private professional engineers; assembles and prepares specifications; oversees the preparation of technical reports; appraises shortages, excesses, quality and costs of existing facilities; represents the City at public hearings and meetings.

Supervises, trains and evaluates assigned personnel; enforces established rules and regulations, standards of conduct and work attendance; compiles with and enforces safe working practices and procedures; maintains records and prepares reports.

MINIMUM QUALIFICATIONS:

Training and Experience: Graduation from an accredited college or university with a Bachelor's Degree in Mechanical Engineering and four years of professional mechanical engineering experience, including two years in a supervisory capacity; or an equivalent combination of training and experience.

Knowledge, Abilities and Skills: Considerable knowledge of mechanical engineering principles and practices; considerable knowledge of heating, ventilating, air conditioning, heat transfer and steam, hot water, potable water, and sanitary piping systems; comprehensive knowledge of building and/or facilities mechanical equipment; considerable knowledge of mechanical engineering design; considerable knowledge of energy conservation methods, techniques and procedures; considerable knowledge of cost determination techniques; good knowledge of supervisory methods, standards of conduct and work attendance; good knowledge of safe working practices and procedures; good knowledge of the use of computer-aided drafting and design (CADD) systems.

Ability to interpret plans and identify defects; ability to determine project costs; ability to plan, organize, implement and supervise a comprehensive energy management program; ability to supervise train and evaluate assigned personnel; ability to express oneself clearly and concisely, both orally and in writing; ability to establish and maintain effective working relationships with fellow employees, officials and the general public; ability to maintain records and prepare reports.

Physical Requirements: Mobility within an office, field and construction site environment; operate a motor vehicle through City traffic.

Special Requirements: Subject to on-call during non-working hours and mandatory overtime during periods of Public Works Emergency Operations.

Licenses and Certificates: Texas Class "C" Drivers License of equivalent license issued by another state; registration as a Professional Engineer in the State of Texas.

Director of Personnel

Department Head

OFFICIAL